

# ASIAN MARKETS



Asian markets have received a tremendous amount of attention of late. From the financial crisis in 1997 to the impending accession of China to the World Trade Organization, Americans are now familiar with the importance and interdependence of Asian markets. Export opportunities have always existed for U.S. companies in Asian markets and market analysis, long-term market commitment and willingness to build lasting relationships are each an important component to successful transactions.

We are focusing attention on just three of the many industries where export opportunities exist in Asia: the automotive industry in Thailand, information technology in all of Asia and environmental technologies in Vietnam. This is a sample of the type of market research that is available to U.S. companies looking to expand to overseas markets.



## THAILAND'S AUTOMOTIVE SECTOR GROWTH OFFERS OPPORTUNITIES

by David Gossack

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As Thailand consolidates its reputation as the "Detroit of the East" with new investments by leading international vehicle and automotive parts manufacturers, American firms are playing a larger role in this market that has historically been dominated by Japanese suppliers. Thailand's economic recovery from the 1997 financial crisis is evidenced by a solid 4.2 percent economic growth rate in 1999 and 4.5 percent projected for 2000. The automotive industry has been a sectoral standout,

with vehicle sales through September 2000 up by 30 percent to 184,000 units. Exports have been booming, with 1999 vehicle and parts exports up by 76 percent to \$1.5 billion, and vehicle exports are projected to reach 181,000 this year, a nearly 50 percent increase. This trend is expected to continue through the first half of this decade, with the Economist Intelligence Unit projecting Thailand's 2003 vehicle production to reach 735,000 units and to comprise more than half of total ASEAN production.

### INVESTMENT BY MAJOR U.S. AUTO MANUFACTURERS

The most notable development in Thailand's industry in 2000 has been the full-scale opening of the General Motors new \$600 million vehicle assembly plant in Rayong in August. At the grand opening, GM Chairman Jack Smith announced that first-year production of the new Zafira minivan would increase by 50 percent over

previous projections to 60,000 units. The success of Ford's two year old joint venture with Mazda, Auto Alliance Thailand, has catapulted Ford into fourth place in Thailand's large market for one-ton pickup trucks, which is the world's second largest pre-1997. Ford's exports all over the world now make it Thailand's second largest vehicle exporter behind Mitsubishi. The concentration of production of one-ton pickups in Thailand makes the country one of the world production centers for this type of vehicle.

American firms are also gaining a growing foothold as a supplier of auto parts for both domestic assembly facilities and for export, another area traditionally dominated by Japanese firms. Major U.S. first tier parts suppliers already in operation here include Dana, Lucas Verity, Arvin, Visteon, Lear and TRW Automotive, which in July 2000 opened its new chassis module plant, joining its existing steering and suspension plant supplying Thai vehicle assembly operations. Delphi is also entering the Thai market and is now constructing its own facility to open in 2002.

Another area for significant expansion by American firms is in technology tie-ups and joint ventures with Thailand's domestic auto parts manufacturers. Thailand's automotive parts manufacturing industry is reputed to be ASEAN's best in terms of product and has been one of the key reasons for international assemblers to establish their ASEAN regional production hub in Thailand. The industry supplies 80 percent of parts used for assembly of pickup trucks and 55 percent for passenger cars assembled in Thailand. The Thai automotive parts industry is rated as ASEAN's most competitive in manufacturing of casting and forging parts, stamping body parts, plastic and rubber parts and glass. Nonetheless, a recent assessment of the industry, by the Thai Society of Automotive Engineers, confirmed that the industry needs to develop and strengthen considerably in order to compete in the world market. Notably weak in inno-

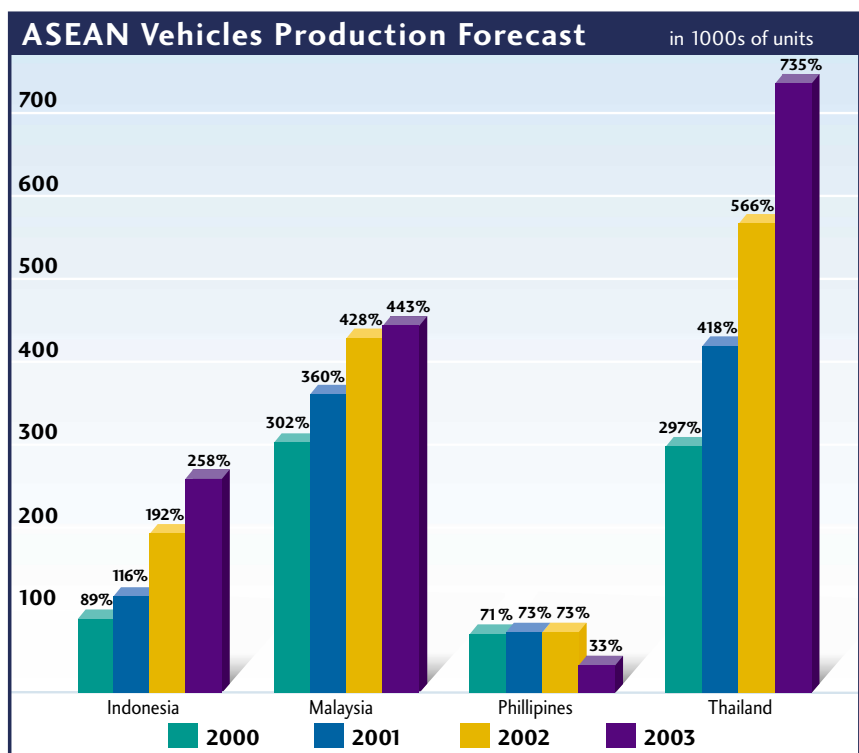
vation and product design, with little R&D investment, Thai firms are far behind American companies in developing the integrated assembly modules increasingly required by the world's leading first-tier firms and assemblers.

### OPPORTUNITIES EMERGE FROM CRISIS

Thailand's 1997 economic crisis has had a severe impact on the country's automotive industry. Among those impacted, the parts industry underwent sweeping changes. Industry experts estimate that the number of Thai wholly owned parts manufacturing firms declined from 85 percent pre-crisis to only 10 percent at present. Approximately 120 to 150 small parts manufacturers went out of business, while the overall number of parts companies declined from 1,600 to about 1000. According to the Board of Investment, more than 300 companies, mostly Thai wholly-owned, were taken over by foreign companies during the past three years. This trend has accelerated the need for Thai firms to find foreign partners with the technological capability and design resources necessary to upgrade local technological capability and manpower to compete in the world market.

Other areas of Thailand's automotive sector also deserve investigation by U.S. exporters. Those sectors that appear most promising include: after-market service equipment: body and paint repair, quick maintenance service; performance parts and accessories for off-road vehicles and one-ton pick-up trucks; franchises for after-market service centers; and automotive accessories

A key point for U.S. aftermarket product manufacturers to recognize in the Thai market is the rapid ongoing restructuring of the automotive aftermarket parts and accessories distribution system. Increasingly, large multinational firms such as B-Quik (Ford) and Cockpit (Bridgestone), are establishing nationwide networks of automotive service centers and new entrants such as AutoBacs (Autobacs/Japan) have joined established firms such as MaxAutoExpress (Makro/Netherlands) in building large auto parts retail stores. What this means for new to market companies is that success in developing access to major distributors and service providers can quickly lead to making products available throughout the country. In addition to this development, there is also a



rapid expansion of supercenters and hypermarkets, similar to Costco and Wal-Mart in the U.S., in metropolitan Bangkok and other major population centers. This means more sales through this new channel for automotive accessories in large commercial stores rather than in specialized automotive stores. Because the expansion of franchised service centers and supercenter stores is relatively new in Thailand and has been well received, this trend is likely to continue for the foreseeable future.

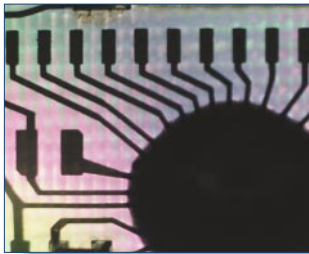
There are two key points for U.S. firms to remember when looking to sell into the aftermarket in Thailand. First, an existing vehicle base consisting of more than 90 percent Japanese make vehicles dominates the Thailand automotive marketplace, particularly for aftermarket

products. Thus, for automotive products and parts to succeed in Thailand, they must be in conformity with Japanese vehicles that are sold in Thailand. Secondly, the Thai market has historically been dominated by sales of one-ton pickup trucks, with such pickups still constituting more than 50 percent of sales. Both of these situations are slowly changing, as major facilities of GM and Ford have established production in Thailand and as overall production and consumption become less-oriented by pickup trucks to include sedans and SUVs. However, for the time-being aftermarket products must be marketed to the existing vehicle base in Thailand.

American companies that are interested in further exploring the various opportunities in the Thai automotive mar-

ket, are invited to participate in the U.S. Department of Commerce's Automotive Trade Mission to the ASEAN countries of Thailand, Malaysia, Indonesia, and the Philippines, April 1-13, 2001.

To obtain further information on the ASEAN automotive trade mission, contact: Jeffrey Dutton, Office of Automotive Affairs, Email: [Jeffrey\\_Dutton@ita.doc.gov](mailto:Jeffrey_Dutton@ita.doc.gov). To obtain information on the Thai market or to utilize one of the many in-country services of the Commercial Service, please contact: David Gossack, Commercial Attaché, The Commercial Service, Bangkok, Thailand, Email: [David.Gossack@mail.doc.gov](mailto:David.Gossack@mail.doc.gov)



## INFORMATION TECHNOLOGY MARKET ANALYSIS

**EXPORTIT ASIA AND SOUTHERN AFRICA**

By Tu-Trang Phan, John Henry, Raymond Cho and Daniel Edwards

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Trade Development's Office of Information Technology Industries (ITI) and the Office of Telecommunications Technologies have jointly produced market studies on selected countries directed toward U.S. small and medium-sized exporters in these sectors. ITI industry specialists, with the support of the U.S. Commercial Service, conducted the research for the studies in each country. Knowledgeable sources were interviewed on site in both the public and private sectors. To date, studies have been completed on selected markets in Europe, Latin America, Asia and Africa. The studies can be found at the following web sites: <http://ExportIT.ita.doc.gov> and <http://Telecom.ita.doc.gov>. The following are excerpts from the two most recently completed studies on markets in southern Asia and Africa.

### ASIA

Asia has become a significant IT and telecommunications market. Regional

demand is expected to reach nearly \$111 billion by the end of 2000, with IT equipment representing 76 percent of this total. Japan is by far the largest country market, followed distantly by China, Singapore and South Korea. China is currently the fastest growing telecommunications market in the world and is projected to surpass the United States as the world's largest telecommunications market within a few years. Demand for IT and telecom equipment in Asia is estimated at over \$100 billion in 2000, representing about 25 percent of the world total. The use of the Internet is also growing quickly in Asia. Active adult Internet users in Asia will reach about 38 million by 2001, and the user base in this region should more than double to 96 million, or 26 percent of the world total by 2003. Key factors driving Internet usage and electronic commerce (e-commerce) growth include: telecommunications deregulation and the build-out of the telecommunications

and Internet infrastructure, which are resulting in lower user fees; declining prices in information technology and telecommunications equipment; a growing array of e-commerce software applications; and a recognition that e-commerce can lower costs and raise operational efficiencies. By 2004, the Asia-Pacific region is expected to represent 20 percent of worldwide online spending, with e-commerce revenues reaching \$1.6 trillion.

A study measuring the relative preparedness for the Internet era of 60 nations around the world published in May 2000 by the E.I.U. e-business forum showed that the e-business readiness ratings of Asian countries vary widely (see table). Singapore and Hong Kong ranked in the top ten while many of the remaining Asian nations were situated in the middle of this list. India, China and Vietnam were among the least prepared. The number of computers in use in this

region has nearly quadrupled from 1993 to 2000 and is projected to grow in excess of 120 percent through 2005 in several of these nations and as much as 291 percent in India and 228 percent in China. Computer penetration in the region ranges from 44 percent in Singapore down to around one percent in China and India. Internet use is expanding rapidly as well. The number of Internet dial-up accounts in Asia totaled 14.8 million in 1999 and should reach around 105 million by 2004, a growth of 605 percent. China is expected to have more than 80 percent of these accounts.

Telecommunications deregulation has been an important factor contributing to the growth of the Internet and e-commerce applications in Asia and the creation of new opportunities for vendors and investors. Many Asian countries are signatories to the WTO Agreement on Basic Telecommunications Services and have made substantial market opening commitments. Competition in telecommunications has spurred the pace of infrastructure deployment and led to lower prices and the introduction of a variety of new services. As these benefits have become apparent, several Asian countries have accelerated the implementation of their market opening commitments.

Wireless services have been especially popular in Asia. Many countries have wireless penetration ratios exceeding 50 percent of their population, and in several Asian countries, including Japan, Hong Kong, Singapore, South Korea and Taiwan, wireless subscribers outnumber wireline subscribers. China and Japan are currently the second and third largest mobile phone markets in the world, and China is expected to surpass the United States as the world's largest mobile phone market in the near future.

A recent study by the International Telecommunications Union reveals that Asia offers tremendous potential for further growth in the telecommunications sector. Although Asia represents about 60 percent of the world's

population, it currently accounts for only about one third of the world market for telecommunications. Many Asian countries have telephone density rates of less than ten phones per hundred inhabitants and several have yet to achieve a teledensity of even one phone per hundred inhabitants.

### SOUTH AFRICA AND BOTSWANA

Southern Africa is a region of tremendous needs, vast potential and future commercial opportunities for those telecommunications and IT companies that have the vision and long term commitment to enter these markets. In general, Southern Africa is also an area about which, unfortunately, mainstream news reports inevitably focus on conflicts, crises or natural disasters. The political and economic transformations underway that will bring great changes to Southern Africa during the coming decade are less well understood. While daunting challenges and problems remain, there is a general acceptance in the region of the urgent need to expand the telecommunications networks and develop creative IT solutions.

South Africa has a \$5 billion IT and telecom market (1999) that is the largest on the continent and is ranked 20th in the world. It is clearly larger and more developed than those of its regional neighbors and accounts for nearly 40 percent of all IT spending in

the greater Africa and Middle East region. However, the country faces many of the same challenges as the other markets. These challenges include: how to further privatize and introduce competition into its market; how to expand network access to geographical areas and populations with no such access today; and how to develop and implement IT solutions that will promote the social development of all citizens as well as allow businesses to operate more productively. Botswana is also atypical of many African countries in that it has a small population and a relatively high standard of living for a large section of its populace. Its average annual GDP growth rate of 9.2 percent from 1966 to 1997 exceeded that of South Korea (7.3 percent) and China (6.7 percent). Botswana too is considering how best to leverage the possibilities of new communications technologies. Sales of computer hardware and software products in Botswana increased from \$20.9 million in 1997 to \$26.2 million in 1999.

Many areas of the IT markets of Southern Africa have yet to be developed. Companies new to these markets will be true pioneers. In many cases, it is difficult to predict just when and to what extent particular IT solutions will work in the marketplace. Certain sectors of South Africa's business and residential markets are likely to follow, but lag current trends in Europe and the United States. Electronic commerce, for example, is still an idea, with limited, if

### E-Business Readiness Ratings of Major Asian Nations

Rank	Country	Business Environment (1)	Connectivity (2)	E-Business Readiness (3)
8	Singapore	8.55	8	8.3
9	Hong Kong	8.52	8	8.3
21	Japan	7.43	8	7.7
24	South Korea	7.3	7	7.2
27	Taiwan	8.13	5	6.6
28	Thailand	7.27	5	6.1
32	Malaysia	6.91	5	6
38	Indonesia	6.16	5	5.6
46	Philippines	6.72	3	4.9
50	India	5.97	3	4.5
51	China	5.88	3	4.4
54	Vietnam	5.3	3	4.2

\* Rank out of 60 nations

(1) Measures the expected attractiveness of the general business environment over the next five years, taking into consideration 70 different indicators such as strength of the economy, outlook for political stability, the regulatory climate, taxation policies, and openness to trade and investment.

(2) Takes into account the state of the existing telephone network and other factors that affect Internet access such as dial-up costs and literacy rates.

(3) A proxy for judging a country's relative preparedness for the Internet era. It is the country's average score across the two previous measures.

Source: The E.U. e-business forum, May 4, 2000



any, real-world applications, in much of that region. But as the telecom infrastructure is rolled out and as use of the Internet takes hold and expands, the market for IT-related products and services will grow accordingly.

In telecommunications, typical opportunities include establishing a joint venture to provide telecom services, often in response to a formal bidding process, and selling all types of telecommunications equipment (switches, optical fiber, satellite earth stations, cellular phones, etc.) to both

government-owned and newer privately-held companies. In the IT sector, around 40-60 percent of Botswana and South Africa's markets are comprised of public-sector sales. There is strong demand for enterprise-class systems and integration services, as well as networking equipment and Internet-related software and services. Growth in the personal computer market for small to medium-sized businesses is robust. For U.S. small and medium-sized information technology companies, local experts suggest that partnering with an established African firm is one of the

best routes to penetrate the market. Other options include the use of agents and distributors for selected products.

Opportunities exist for technology product and service exports both in Asia and Africa but these opportunities must be examined in the context of the market as a whole. Market research is sometimes the most valuable tool that companies can have when entering a new market and the ExportIT studies provide in depth analytical analysis of world potential for information technology exports.



## IN VIETNAM, A PUSH FOR A CLEANER ENVIRONMENT

by George Litman,

*Office of Environmental Technologies Industries, Trade Development*

With many ongoing projects for pollution abatement funded by international organizations, Vietnam presents opportunities for U.S. exporters of environmental technology.

The 1997 Asian economic crisis triggered a slowdown in economic reforms that resulted in a drop in domestic demand throughout Asia. Three years later, Vietnam's economy appears to be on the road to recovery. The Vietnamese government, concerned about the effects of the regional economic crisis on the Vietnamese economy and the implications of slower growth and investment, has engaged in extensive efforts at legal and administrative reform. Key reforms include laws that are designed to inspire economic growth and foreign investment.

This reform effort dates to 1986, when the government of Vietnam set the goal of becoming an industrialized and modernized country by 2020. To achieve this, the government adopted policies that encouraged foreign investment and simultaneously sought to increase output of domestic industries.

The effects were dramatic: from 1991 to 1997, Vietnam experienced extraordinary growth. Annual GDP growth averaged 8 percent during this period, making Vietnam the second fastest growing economy in Asia after China.

Along with the benefits of industrialization, however, came the costs, including degradation of the country's environment. Many enterprises use outdated pollution abatement equipment or second-hand imports, which generate higher levels of pollution. Wastewater goes untreated and is dumped into local waterways. And much of the existing infrastructure in the country's two largest cities, Hanoi and Ho Chi Minh City, has remained unchanged since being built early in the last century.

### OVERSEAS DEVELOPMENT ASSISTANCE THE PRIME DRIVER

The market for environmental technologies in Vietnam today is being driven primarily by overseas development assistance (ODA). Today there are 173

ongoing environment projects in Vietnam, funded by 36 donors. The total financial commitment of these projects is over \$1.4 billion. Multilateral donors fund 48 of these projects with 125 funded by bilateral ODA. In the pipeline are 57 projects valued at over \$770 million. ODA commitments to the environment sector have increased six-fold since 1995.

U.S. bilateral aid to the sector has been relatively slow in coming. This is largely because the focus of U.S.-Vietnam bilateral relations over the past five years has been on re-establishing diplomatic ties and normal trade relations. In general, U.S. policy on bilateral aid has shifted away from big-project funding in recent years, so it is unlikely that U.S. grants to environment projects in Vietnam will ever reach the levels provided by European countries.

However, projects funded by multilaterals such as the World Bank, the Asian Development Bank (ADB), and the U.N. Development Program (UNDP) offer significant opportunities for U.S. firms. Several American companies

have bid successfully for consulting contracts to ODA funded projects, among them Parsons, Black and Veatch, and Camp Dresser McKee.

A new source of financing for U.S. companies has recently become available via the Overseas Private Investment Corporation (OPIC). OPIC provided its first financial support to a U.S. investment project in Vietnam in December 1999, and is looking to play a more active role in supporting U.S. companies in Vietnam following this initial loan. The U.S. Export-Import Bank has established offices in Vietnam but to date has not provided any funding.

### WATER TREATMENT A BIG PRIORITY

Vietnam's most pressing environmental problems are providing clean water and reducing the population's exposure to polluted water. Less than 40 percent of the population has access to potable water. Most of Vietnam's largest companies dump wastewater untreated into canals, streams, and rivers. Opportunities exist for U.S. exporters of equipment related to water supply, purification and treatment. The most commonly imported equipment used for water supply and treatment includes industrial and household pumps, motors, filters, aerators and water purification equipment/systems. Very little of this equipment is produced domestically, and local consumers are familiar with the advantages of international brands. U.S. brands are generally recognized in the local market for their quality and durability.

Vietnam is just starting to tackle its air pollution and hazardous waste problems. The country's first comprehensive studies on the effects of these forms of pollution are underway or in the planning stages. The best opportunities in these sectors are for vendors of monitoring and analysis equipment, as well as for companies that can undertake air quality and hazardous waste studies.

### SELLING TO LOCAL GOVERNMENT

An interesting niche market for environmental technologies in Vietnam is the local one, including regional environmental service companies and research institutions. These organizations are part state-owned enterprise, part academic institution and part government ministry. They can be responsible for everything from issuing environmental impact assessments, to environmental monitoring, to selling pollution control equipment to foreign enterprises.

While sales volumes to these uniquely Vietnamese conglomerates may be less than to ODA-funded projects, they have proven to be a consistent market. In addition to purchasing imported pollution-control equipment, these institutions have been consistent buyers of monitoring and analysis equipment. They import equipment for taking and analyzing soil, water and air samples, as well as laboratory equipment such as pH meters, spectrophotometers and centrifugal machines.

To bid successfully on contracts funded by Vietnamese companies, it is essential to develop strong relationships with the government ministries administering the tender, as well as with the end client (often a provincial or city government). In addition, a willingness to be flexible and to work in a legal environment,

which is less secure than those of developed countries, can be helpful in both establishing strong relationships and in securing contracts.

### FOR MORE INFORMATION

The U.S. Department of Commerce's Office of Environmental Technologies will be releasing soon a report on Vietnam as part of its "Environmental Technologies Export Market Plan" series. The report will provide an in-depth analysis on individual environmental sectors. If you would like a copy of the report, contact George Litman at (202) 482-0560 or via fax at (202) 501-7909. [www.environment.ita.gov](http://www.environment.ita.gov)

Two additional contacts are:

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### Ten Largest Ongoing Development Projects in Vietnam

Project Title	Sector	Donor Agency	Total Budget (thousands of dollars)
Transmission, Distribution & Disaster Rehabilitation Project	Energy Efficiency	World Bank	199,000
Power Sector Rehabilitation & Expansion Project	Energy Efficiency	World Bank	165,000
Ha Noi Urban Infrastructure Development Project	Urban Planning	Overseas Economic Cooperation Fund	107,000
Three Cities Sanitation Project (Ha Long, Da Nang & Hai Phong)	Urban Planning	World Bank/ International Development Association	80,500
Irrigation & Flood Protection Rehabilitation Project	Disaster Management	Asian Development Bank	76,500
Second Provincial Towns Water Supply & Sanitation	Urban Planning	Asian Development Bank	69,000
Ha Noi Drainage Project for Environment Improvement	Urban Planning	Overseas Economic Cooperation Fund	68,349
Red River Delta Water Resources Sector Project	Watershed	Asian Development Bank	60,000
Fisheries Infrastructure Improvement Project	Fisheries	Asian Development Bank	57,000
Forestry Sector Project	Forestry	Asian Development Bank	33,000

Source: U.N. Development Program.